A NEW ÆOLOTHRIPS FROM NEVADA WITH NOTES ON THREE OTHER SPECIES FOUND IN CALIFORNIA

BY DUDLEY MOULTON

Aeolothrips aureus, Moulton, n. sp.

Female holotype: Color bright golden yellow, including legs, with head and thorax orange yellow, extreme tip of abdomen brownish and hind tibiæ brownish in the middle. Antennal segments one to three yellowish, two slightly darker, three brown at extreme tip, four brownish yellow shading darker in outer third, five to nine brown. Fore wings with two irregular, light brown cross bands, otherwise clear yellow. Hind wings without transparent bands. Crescents of ocelli reddish orange. Prominent spines at tip of abdomen dark brown.

Measurements: Total body length 1.7 mm.; head, length .16 mm.; width .20 mm.; prothorax, length .15 mm., width .26 mm. Segments of antennæ: length (width) I, 23 (36); II, 50 (28); III, 100 (26); IV, 70 (23); V, 66 (23); VI, 20 (20); VII-IX, 48 microns; total length, 382 microns.

Head and thorax without conspicuous spines or markings. Ocelli well developed. Antennal segments seven to nine subequal and together with six about as long as segment four. Anterior longitudinal vein of fore wing with thirty-two and hind vein with twentyfive regularly placed extremely small transparent setæ. The only prominent body spines are found at tip of abdomen.

Male allotype: Colored as in the female but with fifth antennal segment lighter in basal half, also with a dark brown spot in the middle of eighth abdominal segment and the median portions of ninth and tenth brownish. The clasping organs on segment nine dark brown. Prominent terminal spines brownish yellow.

Measurements: Total body length 1.3 mm. Segments of antennæ: length, I, 16; II, 46; III, 86; IV, 56; V, 56; VI, 20; VII-IX, 48 microns; total length, 338 microns.

This species belongs in the *fasciatus* group of the genus which has two distinct cross bands on the fore wings and is most closely related to *gloriosus* Bagnall, but is readily distinguished by its larger size and different coloration. The ninth and tenth abdominal segments and eighth tergite are entirely black in *gloriosus* and the distal portions of antennæ are black. Type material: Female holotype; male allotype; twentynine female and eight male paratypes taken in the flowers of a composite, April 8, 1930, by Professor E. O. Essig (M. No. 4178). Types in author's collection and at the University of California, Berkeley, California.

Type locality: Las Vegas, Nevada.

CRYPTOTHRIPS RECTANGULARIS Hood

Mr. A. T. McClay of the University of California has reported finding many black thrips with their red-colored larvæ in the burrows of a Scolytid beetle, Micraces hirtellus, Lec., the lead cable borer, in a dead Linden tree on the Berkeley campus. Collections were made when they were first observed in November, 1929. The tree was subsequently cut up and held for observation of the beetles. Mr. Steinweden with Mr. McClay examined the burrows again in May, 1930, and found that all of the thrips were gone, giving evidence that they had only been hibernating in the burrows. The November collections included two species, Cryptothrips rectangularis Hood and Doccessissophothrips animus Moulton. C. rectangularis Hood, was first found under the dead bark of peach trees at Urbana, Illinois, and later one specimen was taken by Dr. H. E. Burke under bark at West Yellowstone, Colorado. Mr. McClay's observations now extend the habitat of this insect to California (Moulton, No. 3882).

DOCESSISSOPHOTHRIPS ANIMUS Moulton

Four specimens of this insect were collected in the same burrows with *C. rectangularis* Hood. Three other specimens have been known up to the present time, one taken by sweeping nettles at Mountain View, California, and two from Corvallis, Oregon (Moulton, No. 3882).

PECILOTHRIPS ORNATUS Hood

This species was originally taken from under bark of a red-oak tree in Washington, D. C., and later on hickory trees at Harrisburg, Penn., and Macedon, New York. Professor E. O. Essig recently found both adults and larvæ of this insect under bark of a live oak tree on the Berkeley campus, which extends its habitat to California (Moulton, No. 4236).